

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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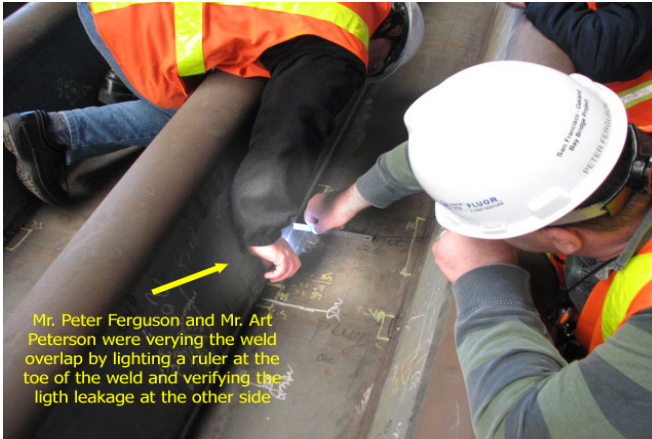
Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.9/14.3,0.0/1.6File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-000858**Date Inspected:** 14-Nov-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Cui Ri Yu**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Mock-up shop**Summary of Items Observed:**

CALTRANS Quality Assurance (QA) Inspector, Alfredo Acuna was present for the fabrication scheduled for this project at the ZPMC facility in Shanghai, China for the San Francisco Oakland Bay Self Anchored Suspension Bridge.

Item Description	WBS	Dwg No.	Status
1 OBG Second weld Trial deck U-ribs			
ABF representatives Mr. Craig Knops, Mr. Peter Ferguson and Mr. Art Peterson and Caltrans representatives Mr. Scott Croff, Mr. Robert Cuellar and the QA inspector were present on the OBG mock-up shop reinspectng areas marked by Caltrans as weld overlap. ABF disagreed with Caltrans that all the areas marked by Caltrans had weld overlap (weld metal protruded over the toe of the weld). ABF and Caltrans representatives were using lighting leakage technique with the intend of observing the present of light leakage at the other side of the ruler as shown on the photograph below. Light leakage at the toe of the weld demonstrated that the angle between the weld profile at the toe of the weld and the bottom deck plate are greater than 90 degrees (assuming that the deck plate area by the weld is flat with respect with the weld axis).			
The QA inspector was assisting ABF and Caltrans representatives by ligthing the steel square while Mr. Peter Ferguson and Mr. Robert Cuellar observed the ligh leakage at the other side. Mr. Scott Croff, Mr. Craig Knops and Art Peterson were marking and recording datum.			
After completing the inspection, ABF and Caltrans agreed with approximately 4828 mm of weld overlap on the second weld trial at the partial penetration weld joint(PJP) at the junction of the rib U-05, U-02, U-75, U-01, U-73 to the deck plate.			

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2 ZPMC visual weld inspection after welding the OBG Mock up Deck plate Section

The QA inspector observed that ZPMC QC inspector performed weld visual inspection to the OBG Mock-up deck plate section at the junction of the close ribs and deck plates (length of the U-ribs were approximately 13158 mm five (5) and 1750 mm five(5)). The QA inspector observed that the major weld discontinuities marked by ZPMC QC were as follow:

13 meters close ribs, Weld Overlap approximately 2500 mm of length at weld joint # 7, Incompleted fusion approximately 300 mm of length on weld # 4.

1.75 meters close ribs, 1200 mm weld overlap weld joint # 1

Summary of Conversations:

The QA inspector did not any relevant conversation on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Acuna,Alfredo	Quality Assurance Inspector
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Reviewed By:	Cuellar,Robert	QA Reviewer
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